

Claim 9, line 2, delete "5" and insert --21--.

Claim 12, line 10, after "is" insert --an--.

Claim 16, line 2, delete "15" and insert --23-- and delete "material of".

Claim 17, line 3, delete "15" and insert --23--.

Claim 19, line 2, delete "18" and insert --26-- and delete "material of".

Claim 20, line 3, delete "18" and insert --26--.

REMARKS

A petition for a two month extension of time has today been filed as a separate paper and a copy is attached hereto.

The examiner will note that the new independent method claims 21, 23 and 26 all recite the limitation of original claim 7 with paraphrasing of language found at page 19, lines 7-14 of the original specification. These claims further recite that the topmost layer of the insulating film is a film having compressive stress (PECVD film in the preferred embodiments) and that it is formed to a thickness providing a total stress for the insulating

film of less than a maximum. Note that the equation or formula for δ_T is a function of the thickness of the topmost insulating film t_i . See, for example, page 17, lines 28-37 of the original specification.

Claim 23 is directed to the embodiment of Fig. 9A. See page 19, lines 20-26 of the original specification. Claims 24 and 27 find support at page 21, lines 10-14 and in the description of the third embodiment beginning at page 21, line 15 of the original specification.

New claim 29 finds support at page 16, line 35 to page 17, line 1 of the original specification and new claims 30-32 find support at page 24, lines 11-12 of the original specification.

The specification has been amended to place it in somewhat better English form. The submitted "Substitute Specification and Abstract" contains no new matter. In order that the examiner can satisfy himself in this regard, also submitted herewith is a marked-up copy of the original specification and abstract from which the "Substitute Specification and Abstract" was typed.

Responsive to paragraph 2 at page 2 of the office action, the typographical error noted there by the examiner is corrected in the "Substitute Specification and Abstract."

It is believed that the newly amended claims are free of the defects noted by the examiner in paragraphs 5 and 6 at page 3 of the office action.

In view of the fact that all claims as amended include the limitation of original claim 7, it is believed that the prior art rejections are all moot with the exception of the rejection of claim 7 as set forth in paragraph 11 of the office action. To the extent that the rejection of original claim 7 for obviousness might be deemed applicable to any of the claims as rewritten and amended, it is respectfully traversed. While Maeda '499 is, as the examiner notes, relevant to a plasma treatment for adjusting stress in an insulating film, it does not address the problem in the context of a multi-layered insulating film and it is not suggestive of adjustment of overall stress in a multi-layered insulating film. Lack of relevance to a multi-layered insulating film is all the more true in the context of the multiple layer insulating films which are the subject of the present invention and in which layers with compressive stress alternate with layers of tensile stress.

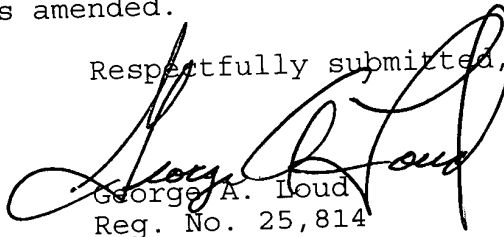
Further, none of Itoh, Maeda '546 and Maeda '499 recognize controlling the thickness of a topmost layer of a multi-layer insulating film to provide an overall stress for the film less than a specified maximum. In rejecting claim 10 the examiner applies the teachings of Harriott et al and characterizes

Harriott as teaching the controlling of film thicknesses to provide a desired overall stress. However, the teachings of Harriott et al are directed to stress in Mo-Si masking films, not insulating films which are the subject of the present invention. Moreover, the teachings of Harriott et al do not recognize that the overall stress can be treated as being a function of the thickness of the topmost film.

deals
with
Si, SiN

In conclusion, it is respectfully requested that the examiner reconsider the rejections of record with a view toward allowance of the claims as amended.

Respectfully submitted,


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Dated: March 29, 1999

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